

Impact of COVID-19 on Paediatric Training at a Tertiary Paediatric London Hospital

Dr Holly Blake, Dr Hannah Lewis, Dr Monica Naik
Department of Anaesthesia, Royal London Hospital, London, UK

Barts Health 
NHS Trust

Introduction

- Our institution is a mixed specialist adult and paediatric teaching hospital and over the last year, we had the highest number of Covid-19 admissions in London.
- The RCOA paediatric curriculum advises a minimum of 20 sessions at intermediate and at least one month at higher level. It is the desire of the RCOA for all UK CCT holders to be competent anaesthetising children above 1 year of age¹.
- Anaesthetic trainees will complete a 3 month dedicated paediatric module at intermediate and higher level. Pre-Covid, the average trainee caseload over 3 months was 182 (151 for LTFT trainees).

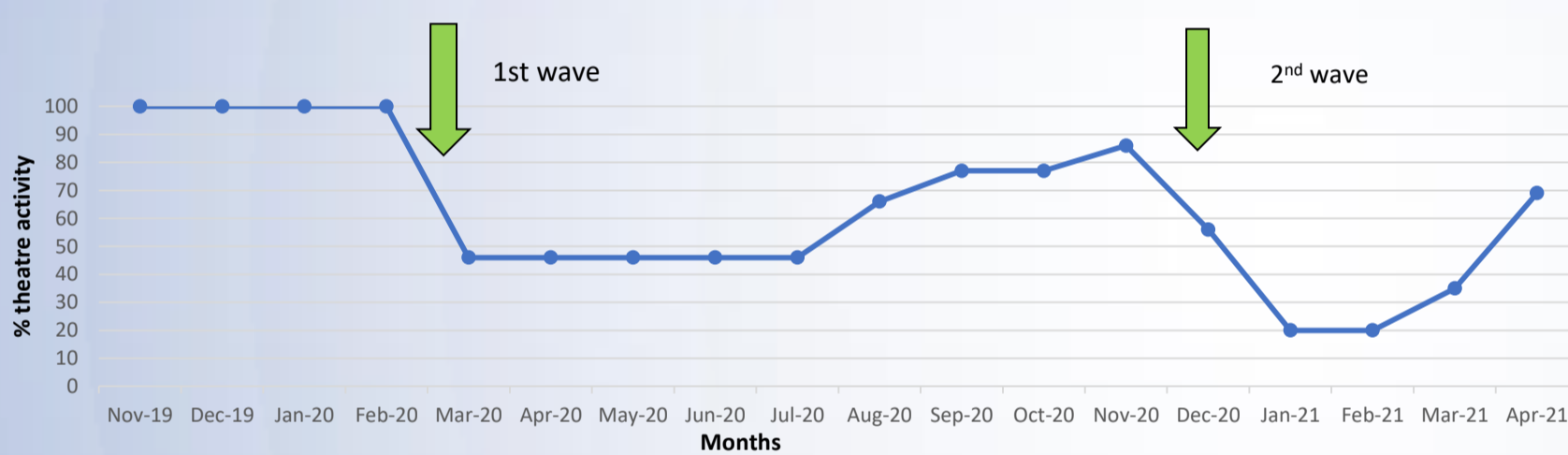
- The Covid-19 pandemic led to significant disruptions to anaesthetic services and postgraduate training nationwide.
- Re-deployment to adult intensive care services, pauses to trainee rotations² and decreased paediatric elective caseload have limited trainee exposure to paediatric anaesthesia.
- Re-deployment of all theatre staff, conversion of theatre areas as satellite ICUs, changes in anaesthetic practice and infection control measures (PPE, loss of anaesthetic rooms and recovery, patient testing) have contributed to reductions in theatre throughput. These practices have adapted and evolved during the 1st and 2nd waves.

Method

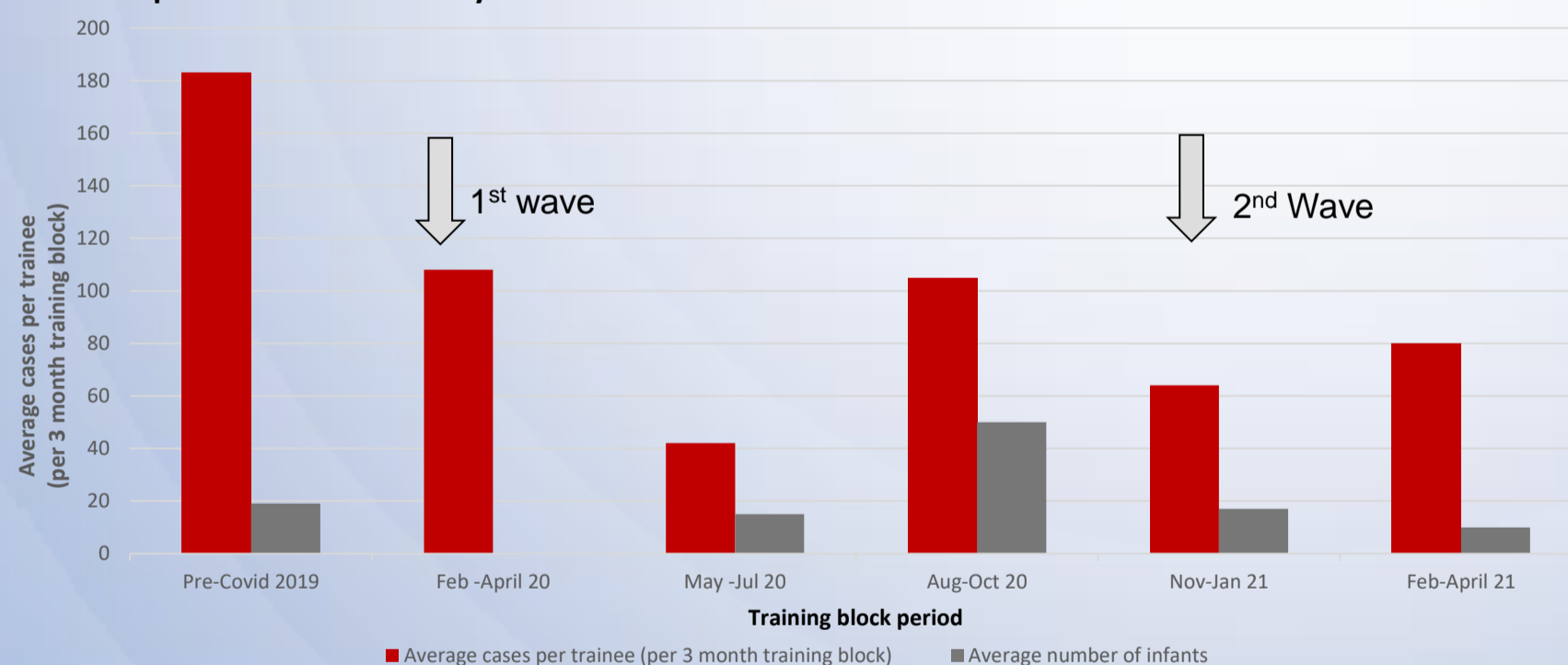
- Our aim was to assess the impact of Covid-19 on paediatric anaesthetic training in our unit between February 2020-April 2021.
- 43 trainees were asked to report their 3 monthly case numbers and case mix pre-covid and from February 2020. All trainees were asked about their work-based place assessments (WBPA) and completion of unit sign off.
- Theatre activity was derived as the total number of theatre sessions running as percentage of pre-covid theatre sessions including outlying areas (MRI, IR and endoscopy). One session was an AM or PM list. Pre-covid, there were 52 sessions per week (Monday to Sunday 0730-1800). At the height of Covid -19, there were only emergency lists.
- During this pandemic, trainee rotas had to be adapted to reflect the demands of ITU. During the Covid 'surge' rota trainees averaged 48 hours per week, spending approximately 50% of shifts covering adult ICU and 50% covering paediatrics.
- Adult and Paediatric Anaesthetic Consultants became resident for 24 hours during the periods of the 1st and 2nd waves.

Results

Graph 1 Theatre activity : Percentage of total theatre lists running / total pre-covid theatre lists



Graph 2 Trainee 3 monthly total case numbers



- 31/43 (72%) trainees provided details of their paediatric anaesthetic logbook.
- Elective paediatric operating ceased during periods of Covid 'surge' activity (1st and 2nd wave)(Graph 1)
- Average case numbers per trainee reduced substantially during the 1st and 2nd wave. (Graph 2)
- Average numbers of neonates and infants remained similar. This is reflective of the urgent and emergency paediatric workload during Covid-19.
- All trainees completed their pre-requisite WBPA and were eligible for unit sign off.
- The first 'surge' rota commenced on 23/3/20. The February 2020 group remained for 6 months in our centre. The second 'surge' rota commenced 18/1/21 and, therefore, November 2020 group remained for 4 months.

Discussion

- Covid-19 has resulted in a substantial reduction in the total number of paediatric cases undertaken during the 3 month modules. The average total number of infants was similar and may be reflective of the urgent and emergency workload. All trainees completed their work-based place assessments and achieved unit sign off.
- The paediatric educational experience has been enhanced with use of online modalities and resident paediatric anaesthetic consultant presence during periods of the pandemic. Many trainees were instrumental in the development of paediatric covid guidelines, protocols and MDT education and simulation. Lessons learnt during 1st and 2nd waves enabled the department and college tutors to further prioritise training opportunities.
- In the future, reconfiguration and expansion of services will mean that further training opportunities will be available including all day emergency lists and three new dental theatres.

Positive Changes since COVID-19

Education	Regular online tutorials (curriculum, journal club, M+M) Increased frequency CT/ educational supervisor meetings
Emergency List Expansion	Half day emergency list increased to all day. Increased training opportunity with greater neonatal and infant caseload.
Rota	Trainees rostered to other paediatric clinical areas (PICU / NICU) and private sector lists during periods of reduced theatre activity
MDT Education	Join NICU /PICU teaching. MDT simulation program
Wellbeing Project	Regular wellbeing sessions for trainees – Coffee club Anonymised forum to discuss concerns

References

1. RCOA. CCT in Anaesthetics. Annex D. Higher Level Training. 2010. p38 – 39. <https://www.rcoa.ac.uk/sites/default/files/documents/2019-08/TRG-CCT-ANNEXD.pdf> (Last accessed 18th April 2021)
2. Rimmer A. COVID-19: trainees will not move jobs in April. *BMJ* 2020;368:m1088